

Confidential Claim Retracted

AUTHORIZED BY: SC

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COMMENTS ON ANACONDA COPPER COMPANY'S
RECLAMATION PLAN FOR JACKPILE - PAGUATE
MINE AT PUEBLO OF LAGUNA, NEW MEXICO

BUREAU OF INDIAN AFFAIRS
ALBUQUERQUE AREA OFFICE
BRANCH OF REAL ESTATE SERVICES
MINERALS SECTION



9404280

CONFIDENTIAL

POL-EPA01-0005362

A. GENERAL

1. The reclamation plan is not a technical document as it now stands. The plan, which is fashioned for non-technical readers, presents vaguely worded conclusions without the needed presentation of the technical analysis upon which the conclusions are based. The data collected and analyzed under the various studies mentioned on page 24 of the plan are not presented in the document but are necessary. The plan should not only present all data available but also subsequent analysis and precisely worded conclusions based on the analysis. At this point, the plan cannot be critically reviewed for its worth in the absence of such data and analysis.
2. Many topics of a general nature specifically requested by the Laguna Tribe to be addressed were not mentioned. These include:
 - (a) timetable
 - (b) adherence to previous hiring policies concerning Laguna Personnel
 - (c) costs
 - (d) RCRA compliance
 - (e) many more specific topics (see below).

B. SPECIFIC

1. SURFACE STRUCTURES

Topics not covered or needing expansion:

- (a) The plan states that all areas of removed houses, permanent structures, roads, parking lots and the railroad spur will be made radiologically safe. The precise radiation levels used for the determination of safe vs. unsafe need to be given.
- (b) The radiological content of railroad ballast and where this material will be disposed of in the pits needs to be given.
- (c) The radiological content of road materials and where these materials will be relocated needs to be presented.
- (d) Location of parking lots needs to be given.
- (e) Radiological description of parking lots and where the contaminants will be relocated needs to be given.
- (f) The locations and disposition of sewage lagoons should be given.
- (g) Locations of all remaining exploration drill holes should be shown on an appropriately-scaled map and the status of the plugging program need to be presented.

2. DUMPS

Topics not covered or needing expansion:

- (a) A complete radiological description of all waste dumps is necessary to be included.
- (b) The details of the slope stability studies conducted for Anaconda need to be given and should include: (a) which eight dumps were used for the studies, (b) how were the results applied to all dumps and (c) how will the slope modifications render the dumps stable.
- (c) The technical basis of planned removal of waste dumps back roughly 200 feet on each side of the Rio Moquino needs to be given. Is this based on estimates of stream meander amplitude and/or flood levels? If not, why not?
- (d) Based on radiological content of each waste dump, an analysis of the release of gamma and radon emissions into the atmosphere from the dumps and the effect of the 2 foot thick topsoil cover on the attenuation of this release needs to be given.
- (e) Based on radiological content and hydraulic conductivity of each waste dump, an analysis of ground water mobility of radionuclides has to be included.
- (f) A predicted erosion analysis of each waste dump should be included.
- (g) It is essential that topographic maps of each waste dump be drawn with 20 foot contours to give a three-dimensional view of the final form of waste dumps.

3. OPEN PITS

Topics not given or needing expansion:

- (a) A complete radiological description of backfill needs to be given.
- (b) The plan states that "backfill is determined by the extent of radiological mineralization on the pit floor and up the pit walls....". A technical analysis needs to be given detailing what levels of radiological mineralization were used for this determination and how particular thicknesses of backfill were arrived at for radiation attenuation.
- (c) Topographic maps of the three backfilled pits with 20 foot contours need to be included to assess what the pit land forms will be and what surface drainage will be. This is not made clear in the plan cross-sections.
- (d) An analysis of pit surface drainage needs to be given.

- (e) An analysis of radionuclide mobility in ground water based on the hydraulic conductivity and ionic sorption properties of the backfill must be presented.
- (f) The slope stability studies of pit highwalls need to be included detailing why buttresses are placed where they are and how the buttresses will render the highwall stable.
- (g) Locations and type of all highwall fencing should be presented. Justification for the decision to fence only the north Paquate Pit has to be included.
- (h) Erosion analysis of backfill and its cover in the pits has to be presented.
- (i) The plan states that "pits will be backfilled to a level which will preclude the possibility of ground-water ponding at the surface following recovery of the aquifer". The final plan will need to cite the evidence upon which this claim is based.

4. PROTORE STOCKPILES AND ORE-ASSOCIATED PILES

Topics not covered or needing expansion:

- (a) A radiological description of these piles is necessary, and needs to be included.
- (b) The exact location of the final disposition of these piles is mandatory for inclusion in the final report since these piles constitute a possible future source of ore.
- (c) Precise levels of expected radiological emissions after removal and clean-up of the pile areas should be given.

5. ORE STOCKPILES

Topics not covered or needing expansion:

- (a) Timetable for removal of ore should be included.
- (b) Precise levels of expected radiological emissions after clean-up of the stockpiles should be detailed.

6. DRAINAGES

Topics not covered or needing expansion:

- (a) The technical basis for the establishment of an approximately 400 foot wide floodplain for the Rio Moquino needs to be given.
- (b) The issue of the reestablishment of the original channel of the Rio Paquate should be addressed.

- (c) The stabilization of stream channels is not considered and has to be in the final version.
- (d) A flood analysis of the Rio Moquino and Rio Paquate detailing the effect of a flood on pits and dumps needs to be conducted.

7. MESITA RESERVOIR

Topics not covered or needing expansion:

- (a) Anaconda claims in the plan that "the majority of sedimentation occurred prior to Anaconda mining activities". The topographic maps and any other available evidence supporting this claim need to be given.
- (b) Anaconda has to outline their plan for clean-up of this area in the case that current radiological studies show elevated levels at Mesita Reservoir.

8. BLOCKED DRAINAGES

- (a) Anaconda presents runoff characteristics of the blocked drainages but does not analyze the ability of the blockages to hold flood waters. This has to be included.

9. GROUND WATER

- (a) Approval of any plan cannot be granted until a quantitative ground water study is included in the plan. This study has to include the effects of the proposed plan on ground water quantity and quality.

10. REVEGETATION

- (a) This office does not possess the level of expertise necessary to evaluate the revegetation aspects of the plan fully. The only comment on this part of the plan is that Anaconda has not fully assessed the abilities to concentrate toxic substances (specifically, selenium, radium, molybdenum, uranium, vanadium) by the various species considered for revegetation.

11. ACCESS

- (a) Anaconda states several times that "livestock access will be provided....". A map showing all such areas of access should accompany the plan.

12. MINE WATER HOLDING PONDS

- (a) The disposition, chemical content and clean-up procedures for these ponds need to be given.